

PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/56712>

Please be advised that this information was generated on 2018-07-08 and may be subject to change.

In search of segmentation

Arno Koning; Rob Van Lier

Author Affiliations

- Arno Koning

Nijmegen Institute for Cognition and Information, Radboud University Nijmegen, The Netherlands, and University of Leuven, Belgium

- Rob Van Lier

Nijmegen Institute for Cognition and Information, Radboud University Nijmegen, The Netherlands

Journal of Vision September 2005, Vol.5, 957. doi:10.1167/5.8.957

Abstract

We investigated object segmentation by means of a visual search task. Our aim was to investigate the role of object interpretations as opposed specific image properties. Three experiments are reported. In the first experiment, we manipulated inner and outer contours of connected versus disconnected objects. We found that the occurrence of search asymmetries depends largely on inner contours, not on outer contours. From this, we conclude that object interpretations, due to inner contours, are predominant. In Experiments 2 and 3, the segmentation due to T-junctions was investigated. More specifically, we designed stimuli in which various interpretations had differences in perceived connectedness. The results indicate that not the T-junctions but rather the interpretations, and with that the level of connectedness, are decisive with regard to the occurrence of search asymmetries. We conclude that, at least for our set of stimuli, segmentation based on specific image properties (like outer contours or T-junctions), can be overruled by object interpretations.

Koning, A. Van Lier, R. (2005). In search of segmentation [Abstract]. *Journal of Vision*, 5(8):957, 957a, <http://journalofvision.org/5/8/957/>, doi:10.1167/5.8.957. [[CrossRef](#)]